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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/612,006	07/07/2000	Clifford Alan Pickover	YO999-467	7649

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Legal Department
T J Watson Research Center
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Yorktown Heights, NY 10598

EXAMINER

QUELER, ADAM M

ART UNIT	PAPER NUMBER
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2178

5

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/612,006

Applicant(s)

PICKOVER ET AL.

Examiner

Adam M Queler

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 9-26 and 35-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 27-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2,4.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. This action is responsive to communications: Application filed 7/7/2000 and IDS's filed 11/14/2000 and 6/28/2003.
2. Claims 1-52 are pending in the case. Claims 1, 9, 17, 24, 27, 35, 43, and 50 are independent claims.

Election/Restrictions

3. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-8 and 27-34, drawn to offering spelling replacements based on occurrence within a document, classified in class 715, subclass 533.
 - II. Claims 9-14 and 35-42, drawn to correction of letter based on keyboard proximity, classified in class 715, subclass 533.
 - III. Claims 17-26 and 43-52, drawn to organizing a list of replacement words, classified in class 715, subclass 533.

The inventions are distinct, each from the other because of the following reasons:

4. Inventions III and I are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the method of determining whether or not a word is in a document is not central to displaying the list. The subcombination has separate utility such as OCR proofreading.

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5. Inventions III and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the specific method of determining nearby keys is not central to the method of displaying the lists. The subcombination has separate utility such as being used for an auto-complete function.

6. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

7. During a telephone conversation with Paul D. Greeley on Friday, 4/16/2004 a provisional election was made with traverse to prosecute the invention of Group I, claims 1-8, and 27-34. Affirmation of this election must be made by applicant in replying to this Office action. Claims 9-26 and 35-52 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Information Disclosure Statement

9. The information disclosure statement filed 6/28/2003 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. **Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Claim 6 recites the limitation "said selected words" in line 1. There is insufficient antecedent basis for this limitation in the claim. For examining purposes only, the Office determines this to mean the related words of claim 4.

Claim Rejections - 35 USC § 102

12. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

13. Claims 1-3, 7-8, 27-29, and 33-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Rogson (USPN 2002/0010726, filed 3/28/2000).

Regarding dependent claim 1, Rogson teaches a method of spell-checking a word processing document (para. 1). A word processing document inherently contains a group of the words that occur within the document. Rogson teaches reporting a misspelled word to a user (para. 45). Rogson teaches a dynamic update list keeps track of the most frequently misspelled words (para. 26) and presents a list of replacement words from the list (para. 45). Rogson also teaches that the dynamic update list is tied to the document (para 48, ll. 6-7), therefore the list contains words selected from the group of words that occur in the document.

Regarding dependent claim 2, a word processing document inherently has a group of words that include text from the contents of the file.

Regarding dependent claim 3, Rogson teaches the list is compiled based on frequency of use (para. 26). Rogson also teaches that location is used to determine replacements (para. 43).

Regarding dependent claim 7, Rogson discloses another dynamic list for the user (para. 47).

Regarding dependent claim 8, Rogson discloses another dynamic list for the user. In the case of the first document the user checks, the list would contain the most recent misspellings (para. 47).

Claims 27-29, and 33-34 contain the same limitations as claims 1-3, 7-8, and are rejected under the same rationale.

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claims 4-6 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rogson as applied to claims 1-3 and 27-29 above, and further in view of Chandrasekar et al. (USPN 6578032, filed 6/28/2000).

Regarding dependent claim 4, Rogson does not explicitly disclose using related words.

Chandrasekar teaches using words related to words found in the document to determine the proper spelling of a word (col. 2, ll. 45-49). It would have been obvious to one of ordinary skill in the art at the time of the invention to add these topical words to the list, as they would be relevant replacement words (col. 2, ll. 45-49).

Regarding dependent claim 5, Rogson does not explicitly disclose using related words.

Chandrasekar teaches using clustering to find topics related to words found in the document to determine the proper spelling of a word (col. 2, ll. 45-49). This clustering is equivalent to latent semantic indexing. It would have been obvious to one of ordinary skill in the art at the time of the invention to add these topical words to the list, as they would be relevant replacement words (col. 2, ll. 45-49).

Regarding dependent claim 6, neither Rogson nor Chandrasekar explicitly disclose an order of words. Chandrasekar does disclose that the related word is used first c2.39-45. It would have been obvious to one of ordinary skill in the art at the time of the invention to list related words first as they were most likely the correct term c2.39-45.

Claims 4-6 contain the same limitations as claims **30-32** and are rejected under the same rationale.

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Conclusion

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US-6,578,032 B1 to Chandrasekar et al.
US-2002/0010726 A1 to Rogson, Ariel Shai
US-2002/0103834 A1 to Thompson et al.
US-5,991,742 A to Tran, Bao Q.
US-5,812,863 A to Ishikawa, Masahiko
US-4,847,766 to McRae et al.
US-6,424,983 B1 to Schabes et al.
US-6,018,735 A to Hunter, Kenneth M.
US-6,131,102 A to Potter, Douglas W.
US-2002/0177999 A1 to ORTEGA, KERRY A.
US-2002/0010639 to Howey et al.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Adam M Queler whose telephone number is (703) 308-5213.

The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R Herndon can be reached on (703) 308-5186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AQ


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER